

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for georeferencing a raster map image, comprising:
 - displaying a raster map and a georeferenced map, wherein the raster map and the georeferenced map are separate maps;
 - marking a first point on the raster map;
 - identifying image coordinates associated with the first point on the raster map;
 - marking a first point on the georeferenced map;
 - identifying geographic coordinates associated with the first point on the georeferenced map that correspond to the first point on the raster map;
 - marking a second point on the raster map;
 - identifying image coordinates associated with the second point on the raster map;
 - marking a second point on the georeferenced map;
 - identifying geographic coordinates associated with the second point on the georeferenced map; and
 - ~~determining a mathematical relationship between the image coordinates and the geographic coordinates.~~
 - computing a georeferencing function that relates the raster map and the georeferenced map to each other, wherein the georeferencing function specifies a

relationship between the image coordinates of the raster map and the geographic coordinates of the georeferenced map.

2. (Currently Amended) The method of claim 1, further comprising:
using the ~~mathematical relationship~~ georeferencing function to determine the geographic coordinates of at least one feature on the raster map.
3. (Currently Amended) The method of claim 1, further comprising:
storing the ~~mathematical relationship~~ georeferencing function ~~with the raster map.~~
4. (Previously Presented) The method of claim 1, further comprising:
manipulating the raster map to display a location on the raster map; and
updating the display of the georeferenced map to display a location identical to the location displayed on the raster map.
5. (Original) The method of claim 1, wherein the geographic coordinates are latitude and longitude.
6. (Original) The method of claim 1, wherein the raster map and the georeferenced map are displayed on the same computer display.

7. (Original) The method of claim 1, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.

8. (Currently Amended) The method of claim 1, wherein the ~~mathematical relationship~~ georeferencing function is represented by a set of general linear functions.

9. (Currently Amended) An apparatus for georeferencing a raster map image, comprising:

means for displaying a raster map and a georeferenced map, wherein the raster map and the georeferenced map are separate maps;

means for marking a first point on the raster map;

means for identifying image coordinates associated with the first point on the raster map;

means for marking a first point on the georeferenced map;

means for identifying geographic coordinates associated with the first point on the georeferenced map that correspond to the first point on the raster map;

means for marking a second point on the raster map;

means for identifying image coordinates associated with the second point on the raster map;

means for marking a second point on the georeferenced map;

means for identifying geographic coordinates associated with the second point on the georeferenced map; and

~~means for determining a mathematical relationship between the image coordinates and the geographic coordinates.~~

means for computing a georeferencing function that relates the raster map and the georeferenced map to each other, wherein the georeferencing function specifies a relationship between the image coordinates of the raster map and the geographic coordinates of the georeferenced map.

10. (Currently Amended) The apparatus of claim 9, further comprising:
means for using the ~~mathematical relationship~~ georeferencing function to determine the geographic coordinates of at least one feature on the raster map.

11. (Currently Amended) The apparatus of claim 9, further comprising:
means for storing the ~~mathematical relationship~~ georeferencing function with the raster map.

12. (Previously Presented) The apparatus of claim 9, further comprising:
means for manipulating the raster map to display a location on the raster map;
and
means for updating the display of the georeferenced map to display a location identical to the location displayed on the raster map.

13. (Previously Presented) The apparatus of claim 9, wherein the geographic coordinates are latitude and longitude.

14. (Previously Presented) The apparatus of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display.

15. (Previously Presented) The apparatus of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.

16. (Currently Amended) The apparatus of claim 9, wherein the ~~mathematical relationship~~ georeferencing function is represented by a set of general linear functions.

17. (Currently Amended) The method of claim 1 further comprising:
identifying image coordinates associated with at least one point on the raster map;
identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and
revising the ~~mathematical relationship~~ georeferencing function.

18. (Currently Amended) The method of claim 17, wherein revising further comprises disregarding any points previously identified that are substantially inconsistent with the ~~mathematical relationship~~ georeferencing function.

19. (Currently Amended) The apparatus of claim 9 further comprising:
means for identifying image coordinates associated with at least one point on the raster map;
means for identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and
means for revising the ~~mathematical relationship~~ georeferencing function.

20. (Currently Amended) The apparatus of claim 19, wherein the means for revising further comprises means for disregarding any points previously identified that are substantially inconsistent with the ~~mathematical relationship~~ georeferencing function.

21. (New) The method of claim 1, further comprising:
storing the georeferencing function in a database.

22. (New) The apparatus of claim 9, further comprising:
means for storing the georeferencing function in a database.